REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

The Abstract has been revised in accordance with the objection thereto.

The claims have been amended responsive to the objection thereto and the rejection under 35 U.S.C. § 112. In this regard, it is noted that the phrase "injection control means is for" in Claim 41 has not been altered since this phrase is believed to be clear for reciting a further function of the previously cited injection control means.

Claims 40-49 were rejected under 35 U.S.C. § 103 as being obvious over Uber in view of Duchon and the newly cited U.S. patent publications to Cherek et al and Dahlin et al. This rejection is respectfully traversed.

According to a feature of the claims, the injection control means reads out a base-operation condition "including a predetermined injection *time* for the injection" ... for calculating an injection pattern of the injection time and rate. That is, as is described in the specification at page 14, lines 21 to page 15, line 2, "When the total amount of the contrast medium to be injected is thus calculated, if the data of the injection rate is registered according to a variable pattern having a waveform as shown in Fig. 10, then the waveform of the variable pattern is vertically moved while the period of time consumed to inject the contrast medium remains unchanged, so that the area surrounded by the waveform, the x-axis, and the y-axis corresponds to the total amount of the contrast medium to be injected."

By so maintaining a predetermined injection time while changing the injection rate to achieve the appropriate dose of contrast medium for each subject, the timing when the concentration of the contrast medium is at least at the optimum value (Fig. 11) remains substantially the same for different subjects. For example, since the injection time is always the same, the contrast medium concentration curves for different subjects will be similar to that shown in Fig. 1-A below. This is advantageous since the operator can easily time the

fluoroscopic image capture for the maximum concentration, so that lower doses of contrast medium can be used. On the other hand, where the injection time is changed for different subject data, the peak concentration times will vary for different subjects, as in Fig. 1-B below. This is problematic since the operator must then refer to the subject data to calculate when to capture a fluoroscopic image for maximum concentration in each patient.
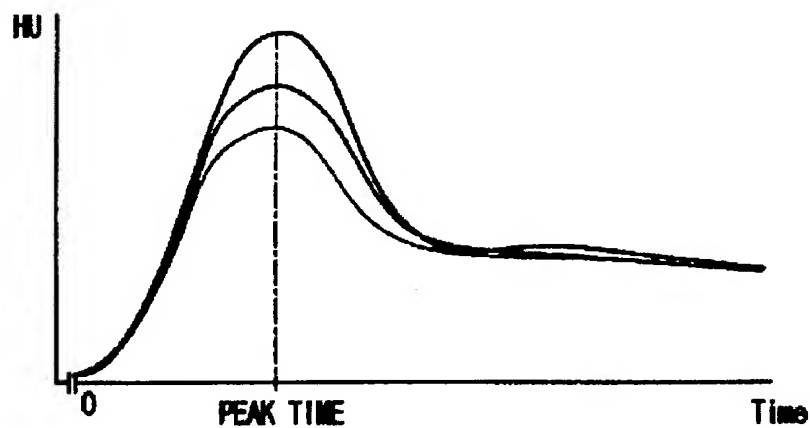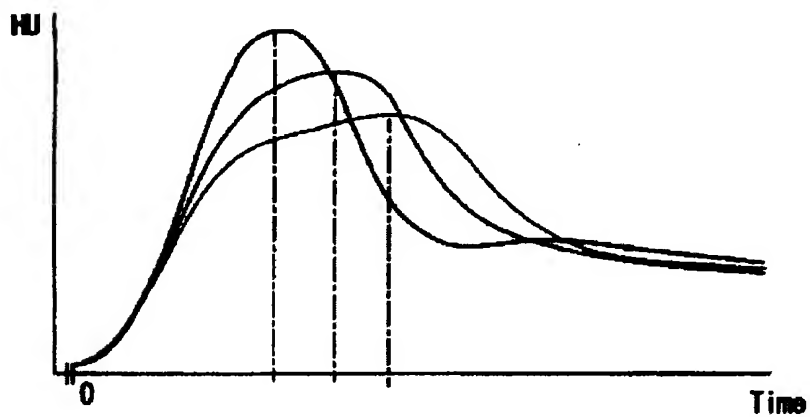
Fig. 1-A

Fig. 1-B

As the Office Action has noted, <u>Uber</u> calculates injection parameters including "time delay," based on patient data. Thus, it changed for each patient, and so <u>Uber</u> does not teach the claimed "predetermined injection time."

<u>Duchon</u>, <u>Cherek et al</u> and <u>Dahlin et al</u> were cited to teach touch screens, and not the claimed "predetermined injection time." Accordingly, these references do not overcome the aforementioned shortcoming of <u>Uber</u>, and so the claims define over this prior art.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.
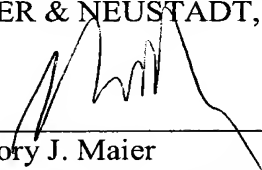
Respectfully submitted,

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